

(No Model.)

W. F. WHITING.
BUTTON.

No. 420,289.

Patented Jan. 28, 1890.

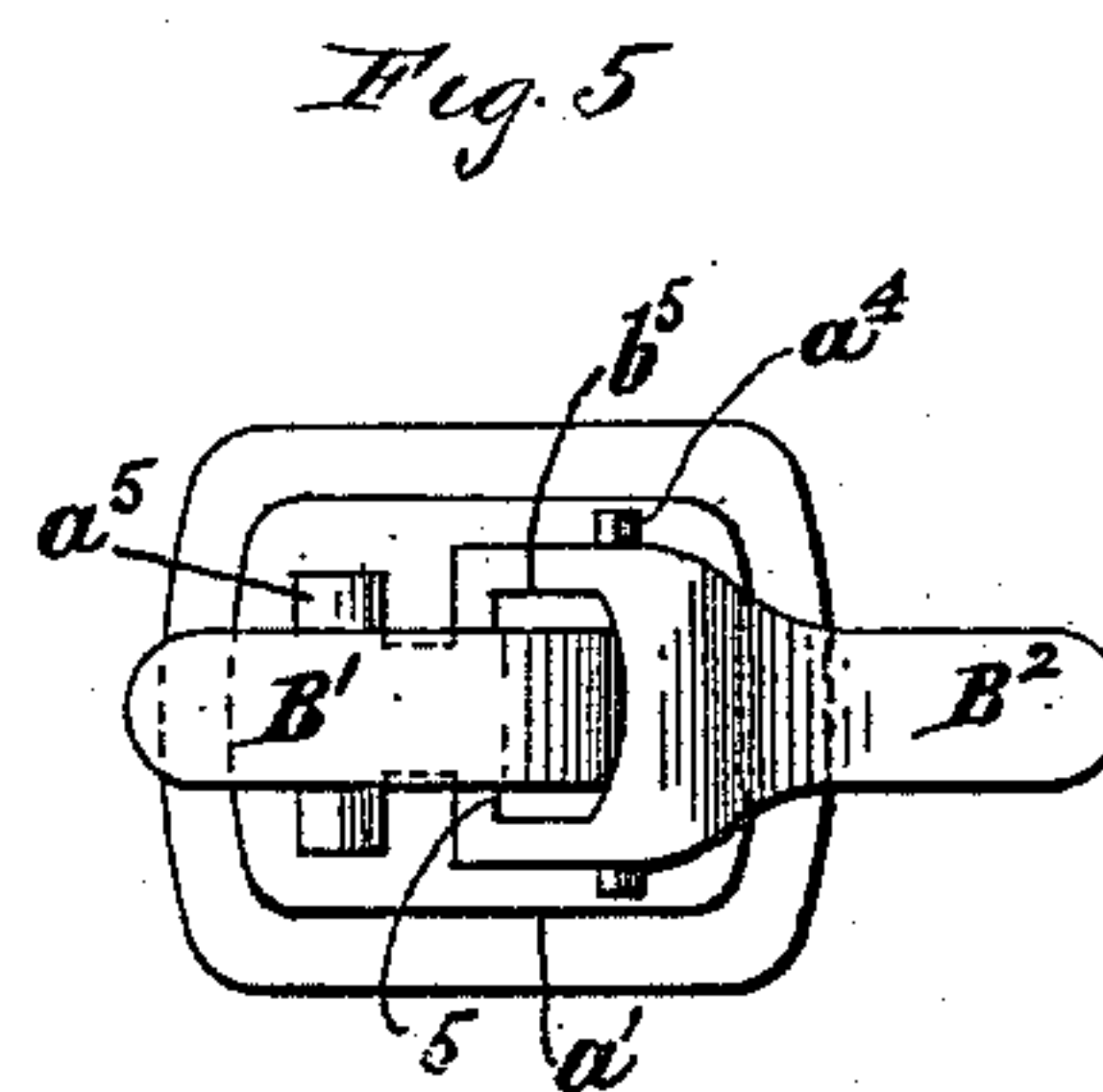
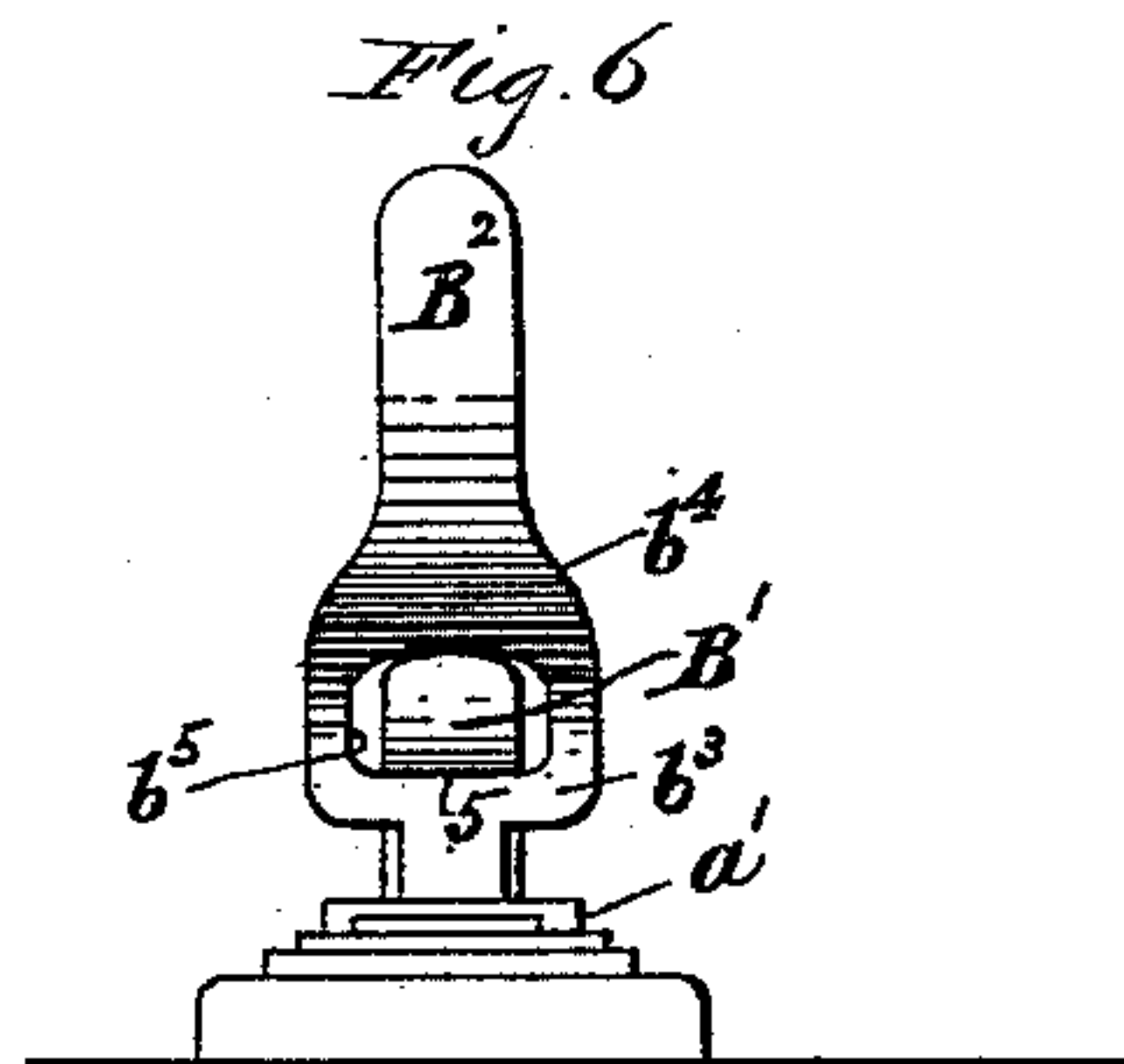
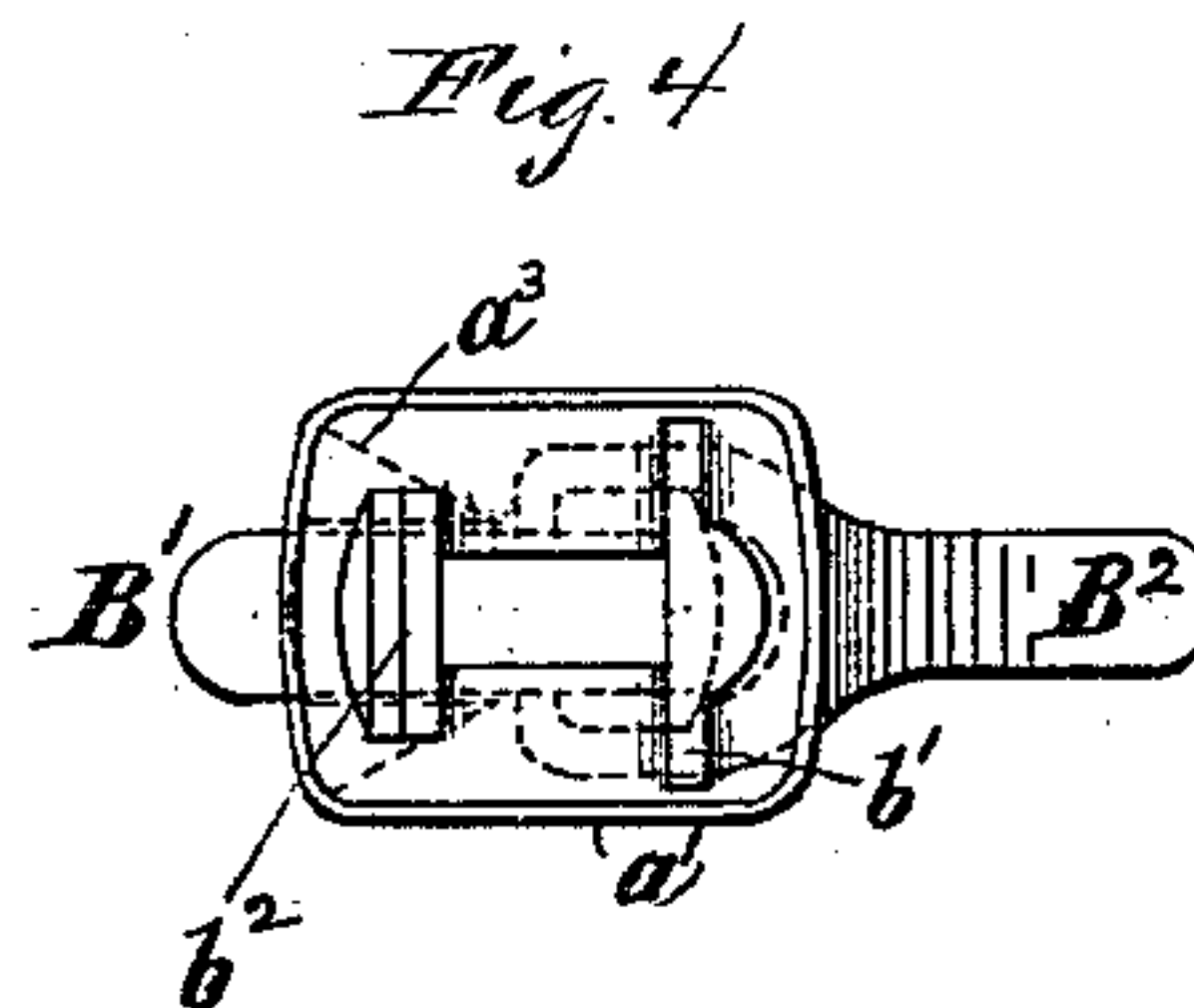
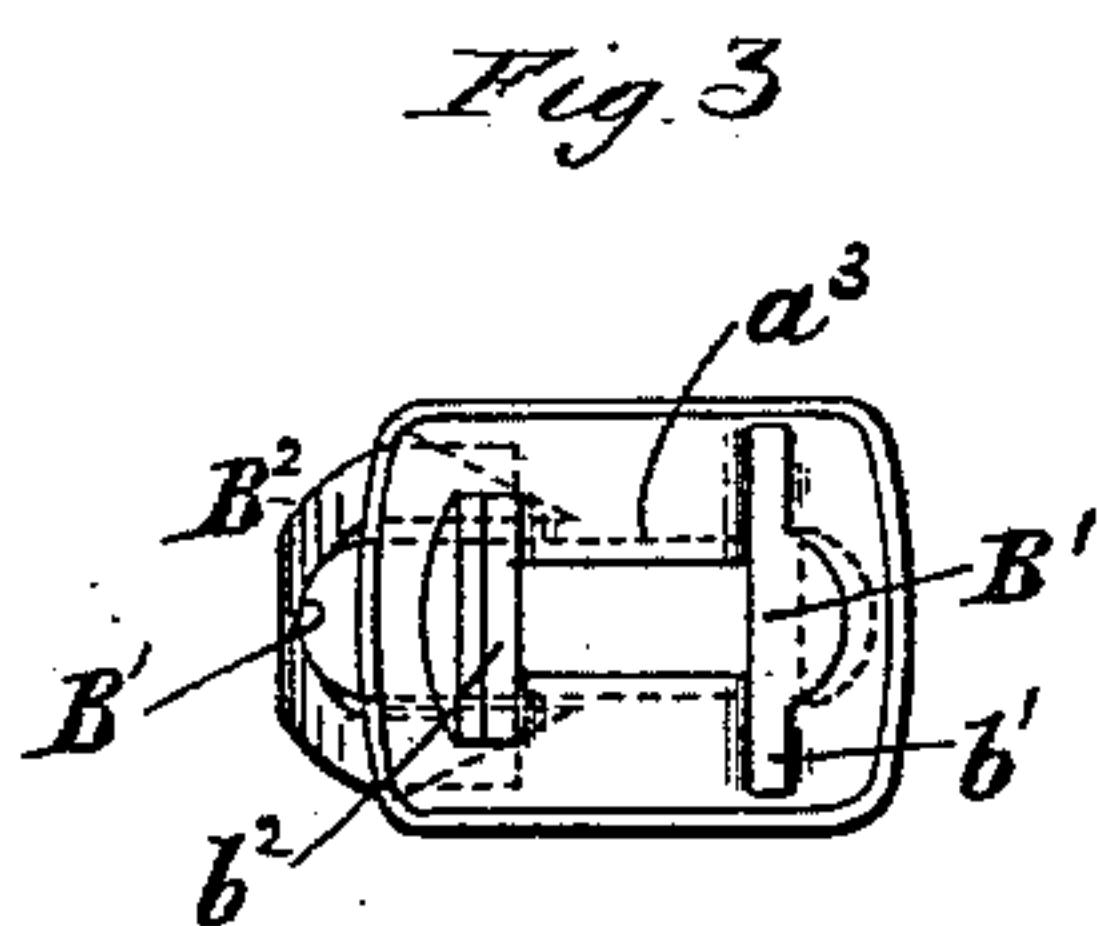
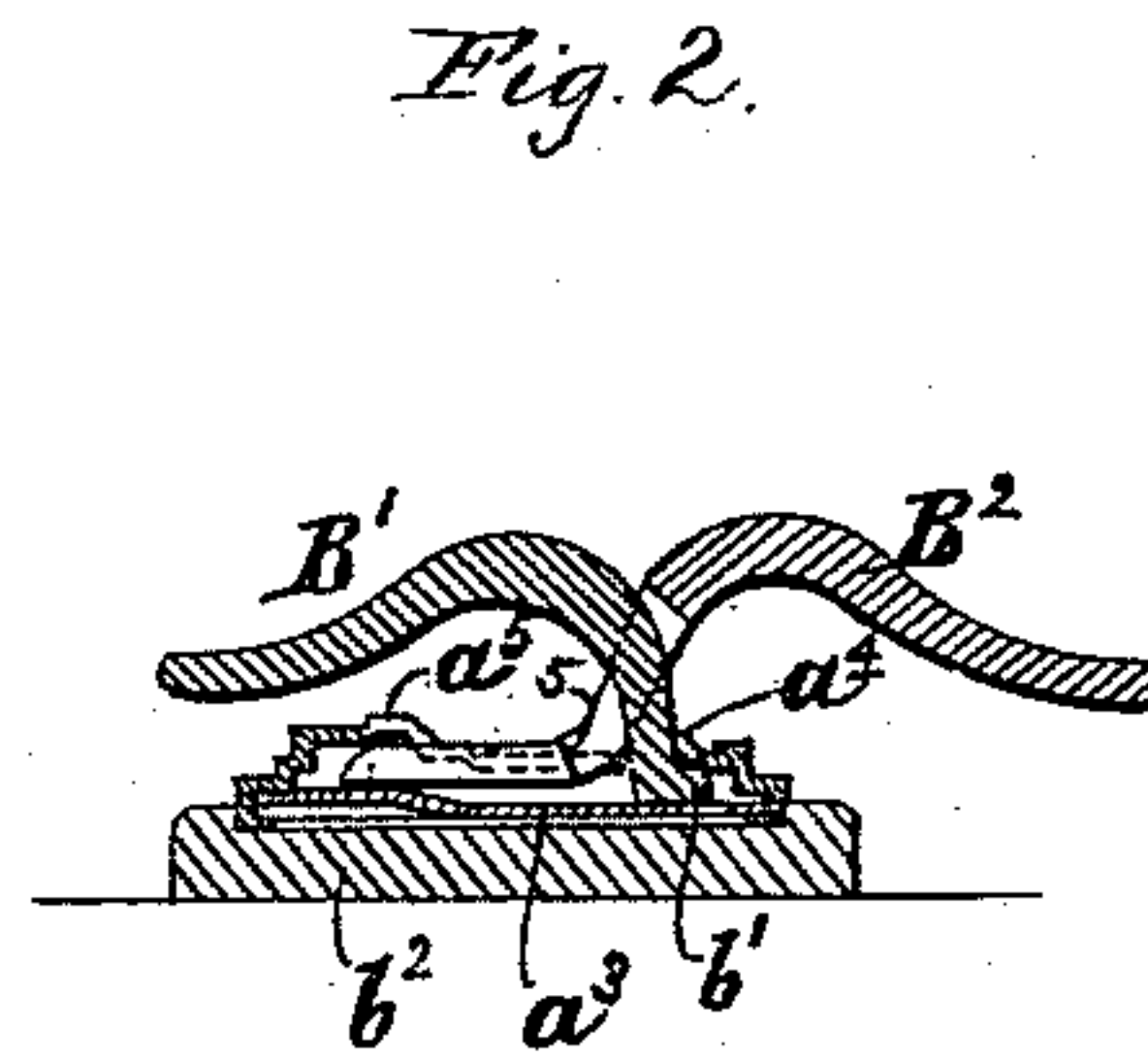
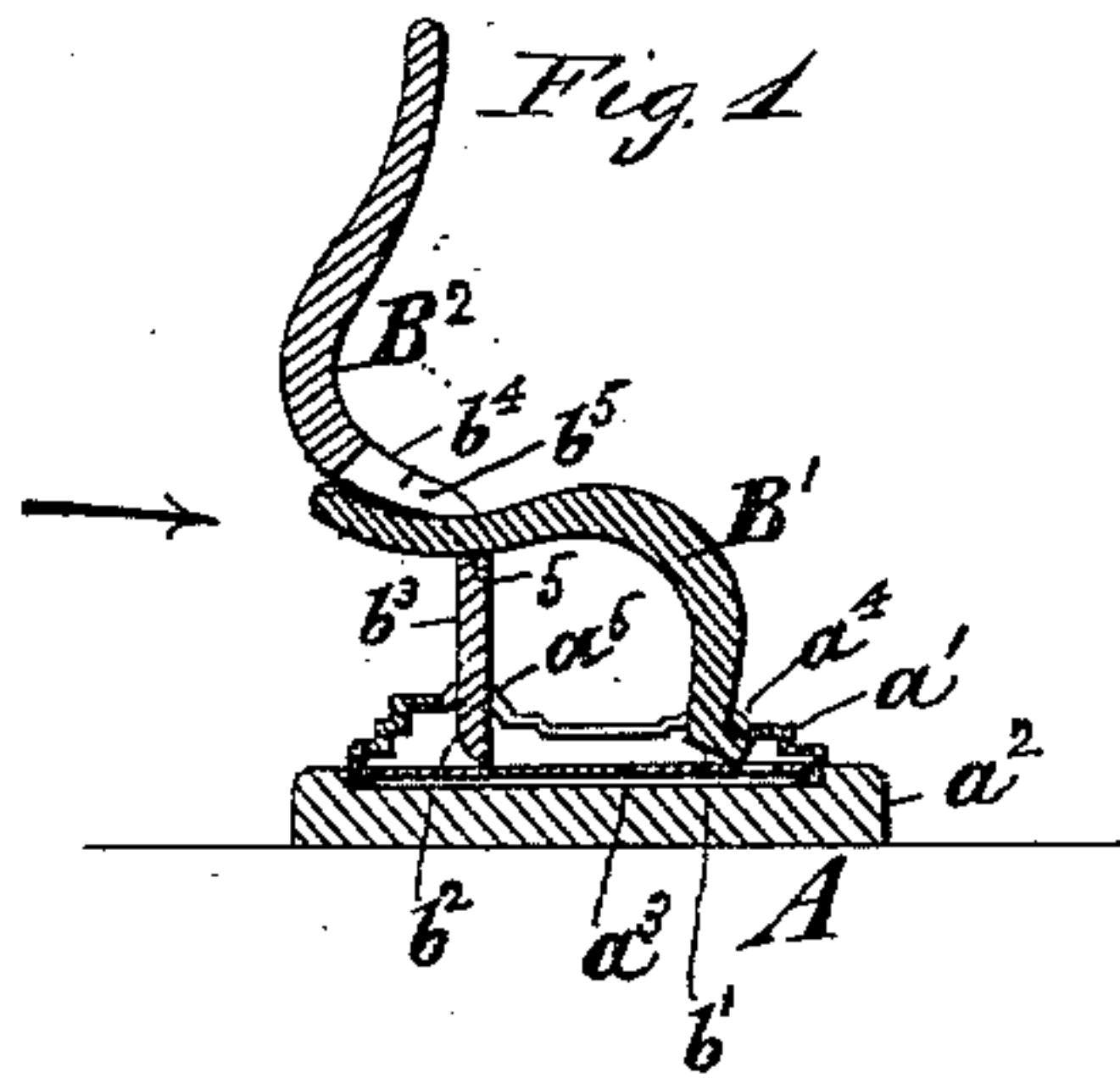


Fig. 7.

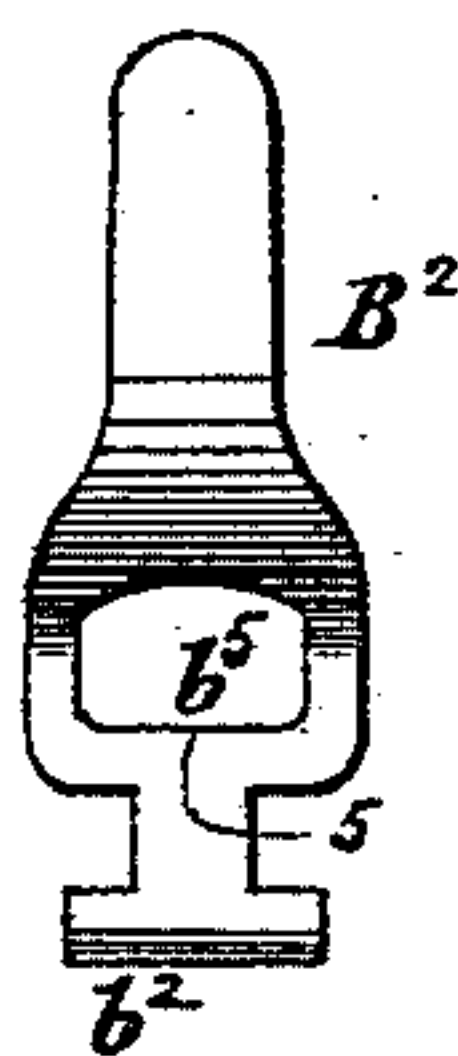


Fig. 8

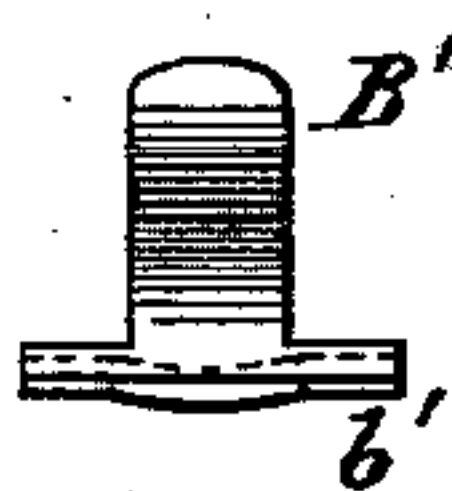
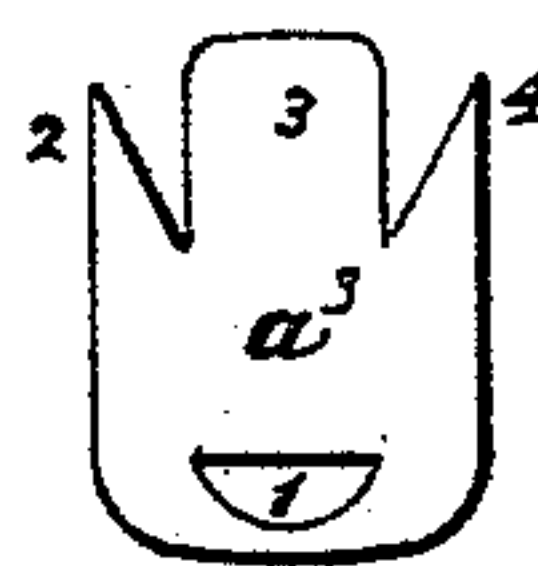


Fig. 9.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM F. WHITING, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF
ONE-HALF TO HOWARD & SON, OF SAME PLACE.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 420,289, dated January 28, 1890.

Application filed September 7, 1889. Serial No. 323,278. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. WHITING, of Providence, in the county of Providence and State of Rhode Island, have invented a certain new and useful Improvement in Buttons, of which the following is a specification.

I will describe a button embodying my improvement, and then point out the novel features in the claims.

10 In the accompanying drawings, Figure 1 is a sectional side view of a button embodying my improvement, its arms being adjusted into the positions which they are intended to assume during the insertion of the button into a button-hole. Fig. 2 is a similar view of the
15 button; but here the arms are shown as occupying the position which they assume after their insertion into a button-hole. Fig. 3 is a top or front view of the button with the cap or front piece removed, the arms being in the position in which they are represented in Fig. 1, and a spring being represented in dotted outline. Fig. 4 is a top or front view of the but-
20 ton with the cap or front piece removed, the arms being in the position in which they are represented in Fig. 2, and a spring being represented in dotted outline. Fig. 5 is a back or bottom view of the button with its arms in the position represented in Fig. 2. Fig. 6
25 is a view of the button as it is seen when looked at in the direction indicated by the arrow which is placed adjacent to Fig. 1, the arms of the button being in the position in which they are represented in Fig. 1. Figs.
30 7 and 8 are side views of the two arms detached as they are seen when viewed in the direction indicated by the arrow which is placed adjacent to Fig. 1, the arms of the button being in the position in which they are represented in Fig. 1. Fig. 9 is a view of the
35 spring detached.

Similar letters and numerals of reference designate corresponding parts in all the figures.

45 A designates the head of the button. It consists, as here shown, of a body-piece a' , of sheet metal, a front piece a^2 , of any suitable material, fitted to the body-piece, and a spring a^3 , fitting between the front piece and the

rear or back of the body-piece. As shown, 50 the body-piece is made box-shaped.

B' B^2 designate two arms hinged to the head A. As here shown, both of the arms have at the upper ends integral pivots or cross-bars b' b^2 , which fit in recesses or de- 55 pressions a^4 a^5 , formed in the back of the body a' of the head, and have shoulders outside of the body a' of the head to prevent them from moving farther into the head than is desirable. It will be observed that the 60 arms are hinged to the head at points considerably distant from each other. Both arms have a swinging movement relatively to the head.

The spring a^3 bears against the pivots or 65 cross-bars b' b^2 of the arms B' B^2 and holds them in the recesses a^4 a^5 . It also resists the swinging of the arms, owing to the fact that the pivots or cross-bars have flat surfaces which bear against the spring. I have shown 70 the spring as having at one end a segment-shaped opening 1, occupying a position over a segment-shaped lug with which the arm B' is provided. At the other end I have shown the spring as notched, so as to form three 75 tongues 2 3 4. The central tongue 3 bears upon the pivot or cross-bar of the arm B^2 . The arm B' extends a short distance rearwardly from the head, and then curves around and extends approximately parallel with the 80 head, but at the extremity is bent away from the head. The arm B^2 has a straight portion b^3 , which, when the arm is in the position for insertion into a button-hole, extends at right angles to the head, but when the arm has 85 been inserted in the button-hole extends parallel with the head. Beyond this straight portion b^3 the arm B^2 has a portion b^4 , bent at about a right angle to the portion b^3 , and beyond the portion b^4 has a portion which ex- 90 tends approximately parallel with the portion b^3 , but at the extremity is bent outward. At the junction of the portion b^3 with the portion b^4 there is formed in the arm B^2 a hole b^5 , and through this hole the arm B' ex- 95 tends.

To insert the button into a button-hole, the arm B^2 is swung into the position in which it

is represented in Fig. 1. In swinging into this position the edge 5 of its hole b^5 , acting on the arm B' with a cam-like action, swings this arm so that its outer end portion will be moved farther away from the head of the button. Although the swinging movement of the arm B' is a slight one, it, withal, materially facilitates the insertion of the arms into a button-hole. After the insertion of the arms into the button-hole the arm B^2 is swung into the position in which it is represented in Fig. 2, and in swinging into this position it allows the arm B' to swing into the position in which it is represented in Fig. 2. The outer end portions of both the arms, it will be seen, will be close to the back of the garment provided with the button-hole.

What I claim as my invention, and desire to secure by Letters Patent, is—

20 1. In a button, the combination of a head, two arms B' B^2 , hinged to the head, and the arm B^2 having a portion b^3 at right angles to the head when the arm is open, a portion b^4 ,

extending from the portion b^3 , and a hole b^5 at the junction of the portions b^3 b^4 , and which receives the arm B' , substantially as specified. 25

2. In a button, the combination of a head, the arm B^2 , hinged to the head and having a portion at right angles to the head when the arm is open and parallel with the head when the arm is closed, the arm B' , hinged to the head and provided inside the head with a lug or projection, and a spring, substantially as specified. 30

3. In a button, the combination of a head, the arm B^2 , hinged to the head, the arm B' , hinged to the head and provided with a lug or projection, and a spring bearing against the latter and notched to form three tongues, one of which bears against the arm B^2 , substantially as specified. 35 40

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Witnesses:

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